

# Lake Mendocino and Lake Sonoma Water Accounting Weekly Report (Term 14, June 2022 TUCO)

Report Date: 11/18/2022

Units are cfs unless noted otherwise

	11/11/2022	11/12/2022	11/13/2022	11/14/2022	11/15/2022	11/16/2022	11/17/2022
<b>I. Upper East Fork Reach</b>							
<b>Potter Valley Project</b>							
Tunnel Diversion	12.0	11.0	11.0	12.0	12.0	12.0	12.0
PVID Requested Delivery	10.0	10.0	10.0	10.0	10.0	10.0	10.0
PVID Canals Actual Delivery	0.3	0.4	0.4	0.8	1.1	1.1	1.1
East Fork Release	12.0	11.0	11.0	11.0	11.0	11.0	11.0
PVID E Fork Diversions	9.7	9.6	9.6	9.2	8.9	8.9	8.9
PVID Water Use - PG&E Contract	10.0	10.0	10.0	10.0	10.0	10.0	10.0
PVID Water Use - License 5264	0.0	0.0	0.0	0.0	0.0	0.0	0.0
East Fork Downstream of PVID (Import)	2.3	1.4	1.4	1.8	2.1	2.1	2.1
PVID Canal Net Return Flow (assumed)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>East Fork / Potter Valley Reach Analysis</b>							
USGS E Fork @ Calpella	14.2	14.2	14.2	14.3	13.8	14.0	14.0
Net Reach Loss(-)/Gain(+)	+2.2	+3.2	+3.2	+2.3	+1.8	+2.0	+2.0
Unimpaired Natural Flow @ Calpella (est.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-PVID East Fork Net Reach Losses (est.)	-12.2	-13.2	-13.2	-12.3	-11.8	-12.0	-12.0
Natural Flow	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Import (neg. value is return flow)	-12.2	-13.2	-13.2	-12.3	-11.8	-12.0	-12.0
<b>II. Lake Mendocino</b>							
<b>Reservoir Operations</b>							
Calculated Inflow (ac-ft)	28	48	36	36	25	36	22
(cfs)	14	24	18	18	13	18	11
Natural Flow	3	14	8	7	2	7	0
Import	12	11	11	11	11	11	11
Storage Change (ac-ft)	-40.0	-13.0	-27.0	-26.0	-39.0	-27.0	-39.0
(cfs)	-20	-7	-14	-13	-20	-14	-20
Stored Natural Flow (cfs)	0	0	0	0	0	0	0
Stored Import Water (cfs)	0	0	0	0	0	0	0
Evaporation (ac-ft)	6.4	5.3	7.4	6.4	8.5	8.5	7.4
RVCWD Diversion (ac-ft)	0	0	0	0	0	0	0
CVD Release Gage	31	28	28	28	28	27	27
Storage (Project Water)	17	4	10	10	15	9	16
Natural Flow	3	14	8	7	2	7	0
Import Water	12	11	11	11	11	11	11
<b>East Fork Min Instream Flow Requirement</b>	25	25	25	25	25	25	25
<b>Compliance Gage</b>	<i>Rvr mi.</i>						
CVD Release	99.9	31	28	28	28	27	27
<b>CVD Project Water Release to Meet Min Flow Requirement</b>							
Total Pass-through Water	14	24	18	18	13	18	11
Project Water Release Required	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>III. Upper Russian River Reach</b>							
<b>Minimum Instream Flow Requirement</b>	25	25	25	25	25	25	25
<b>Controlling Compliance Gage</b>							
Min Gage Flow	31	28	28	28	27	26	27
Controlling Gage	Forks	Forks	Forks	Forks	Hopland	Hopland	Forks
<b>All Compliance Gages</b>							
	<i>Rvr mi.</i>						
Forks (CVD + USGS 11461000)	99.0	31	28	28	28	27	27
Talmage (USGS 11462080)	96.1	35	33	32	31	30	32
Hopland (USGS 11462500)	84.8	36	32	30	29	27	27
Cloverdale (USGS 11463000)	70.9	50	45	40	37	32	30
Geyserville (USGS 11463500)	54.4	67	57	53	49	45	41
Jimtown (USGS 11463682)	48.5	79	69	62	58	53	47
Digger Bend (USGS 11463980)	38.2	66	59	53	50	46	40
Healdsburg (USGS 11464000)	35.6	66	61	56	52	49	45
<b>Net Reach Loss(-)/Gain(+)</b>							
Forks - Talmage	+3	+5	+4	+3	+2	+3	+5
Talmage - Hopland	-0	-2	-2	-3	-4	-4	-4
Hopland - Cloverdale	+11	+10	+9	+7	+5	+5	+4
Cloverdale - Jimtown	+20	+20	+18	+18	+18	+16	+15
Jimtown - Digger Bend	-17	-13	-10	-9	-8	-7	-7
Digger Bend - Healdsburg	-2	-1	+0	+1	+2	+3	+4
Upper Russian Net Reach Loss/Gain	+15	+20	+19	+18	+14	+16	+16
<b>CVD Project Water Release to Meet Min Flow Requirement</b>							
Net Reach Loss(-)/Gain(+) to Controlling Gage	+0	+0	+0	+0	-1	-1	+0
Storage (Project Water)	0	0	0	0	-1	-1	0
Pass-through Water (Nat. + Imp.) + Natural	0	0	0	0	0	0	0
Total Pass-through Water	14	24	18	18	13	18	11
Project Water Release Required	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes:  
 - Water Accounting for the Upper Russian River is an analysis that approximates the current conditions based on methodology in Term 11 (2/11/21 Order) report and modified by Term 12 (6/14/21 Order) report. Values listed include estimated values where measurements are not currently available (red italics).

**IV. Lake Sonoma**

**Lake Sonoma**

Storage Change (ac-ft)	-220.0	-219.0	-233.0	-233.0	-232.0	-247.0	-231.0
(cfs)	-111	-110	-117	-117	-117	-125	-116
Evaporation (ac-ft)	4.7	5.8	5.8	4.7	7.0	5.8	5.8
Inflow (Natural Flow)	0	0	0	0	0	0	0
WSD Release Gage	106	106	106	107	107	108	105
Storage (Project Water)	106	106	106	107	107	108	105
Natural Flow	0	0	0	0	0	0	0

**V. Lower Dry Creek Reach**

**Minimum Instream Flow Requirement**

	105	105	105	105	105	105	105
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**Controlling Compliance Gage**

Min Gage Flow	106	106	106	107	107	108	105
Controlling Gage	WSD Release	WSD Release	WSD Release	WSD Release	WSD Release	WSD Release	WSD Release

**All Compliance Gages**

	<i>Crk mi.</i>						
WSD Release	14.3	106	106	106	107	107	108
Yoakim (USGS 11465200)	11.1	118	120	119	119	122	113
Lambert (USGS 11465240)	6.8	112	112	111	110	110	111
Dry Crk Mouth (USGS 11465350)	0.1	110	110	111	111	111	111

**WSD to Russian River Confluence Reach Analysis**

Total Pass-through Water	0	0	0	0	0	0	0
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**Net Reach Loss(-)/Gain(+)**

WSD - Yoakim	+12	+14	+13	+12	+15	+10	+8
Yoakim - Lambert	-6	-7	-9	-9	-12	-8	-1
Lambert - Dry Crk Mouth	-2	-3	-0	+2	+1	+1	-0
WSD - Dry Crk Mouth	+4	+4	+4	+5	+4	+3	+6

**WSD Project Water Release to Meet Min Flow Requirement**

Net Reach Loss/Gain to Controlling Gage	+0	+0	+0	+0	+0	+0	+0
Project Water Release Required	Yes	Yes	Yes	Yes	Yes	Yes	Yes

**VI. Russian River - Dry Creek Confluence**

**Upper Russian River Flow (Healdsburg Gage)**

L. Mendocino Project Water + Import Water	29	14	20	21	26	20	27
Natural Flow	18	33	27	25	16	23	16

**Dry Creek Flow (Mouth Gage)**

L. Sonoma Project Water	106	106	106	107	107	108	105
Natural Flow	4	4	5	5	4	3	6

**Russian River d/s of Confluence Flow**

	176	170	167	164	161	158	155
L. Mendocino Project Water + Import Water	29	14	20	21	26	20	27
L. Sonoma Project Water	106	106	106	107	107	108	105
Natural Flow	22	37	31	30	20	27	23

**VII. Lower Russian River Reach**

**Minimum Instream Flow Requirement**

	35	35	35	35	35	35	35
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**Controlling Compliance Gage**

Min Gage Flow	136	132	122	115	114	112	105
Controlling Gage	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda

**All Compliance Gages**

	<i>Rvr mi.</i>						
Windsor (USGS 11465390)	26.6	<i>n/d</i>	<i>n/d</i>	<i>n/d</i>	<i>n/d</i>	<i>n/d</i>	<i>n/d</i>
Hacienda (USGS 11467000)	21.8	136	132	122	115	114	112

**Confluence to Windsor Reach Analysis**

Net Reach Loss/Gain to Windsor Gage	-	-	-	-	-	-	-
L. Mendocino Project Water + Import Water	-	-	-	-	-	-	-
L. Sonoma Project Water	-	-	-	-	-	-	-
Natural Flow	-	-	-	-	-	-	-

**Confluence to SCWA Wohler Production Facility Reach Analysis**

Approx. Flow u/s of Wohler	183	187	170	164	158	171	149
Net Reach Loss(-)/Gain(+)	+7	+17	+4	+1	-2	+13	-6
L. Mendocino Project Water + Import Water	29	14	20	21	26	20	27
L. Sonoma Project Water	103	103	104	104	104	105	102
Natural Flow	29	54	35	30	18	40	17

**Confluence to Hacienda (Guerneville) Reach Analysis**

Net Reach Loss(-)/Gain(+)	-40	-38	-45	-49	-47	-46	-50
L. Mendocino Project Water + Import Water	29	14	20	21	26	20	27
L. Sonoma Project Water	56	48	56	55	59	46	58
Natural Flow	29	54	35	30	18	40	17

**VIII. Water Production under Sonoma Water Water Rights (ac-ft)**

**Lower Russian River**

Sonoma Water Total	94.0	109.9	96.1	97.9	88.2	117.5	87.0
Wohler	50.9	69.5	51.8	32.4	42.3	39.3	37.8
Mirabel	43.1	40.4	44.3	65.5	46.0	78.3	49.2
Town of Windsor River Wellfield	5.3	5.1	4.8	5.2	5.6	5.3	5.4
Camp Meeker & Occidental	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Upper Russian River**

City of Healdsburg							
Gauntlett & Fitch Mtn	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Dry Creek**

City of Healdsburg							
Dry Creek Wellfield	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Notes:**

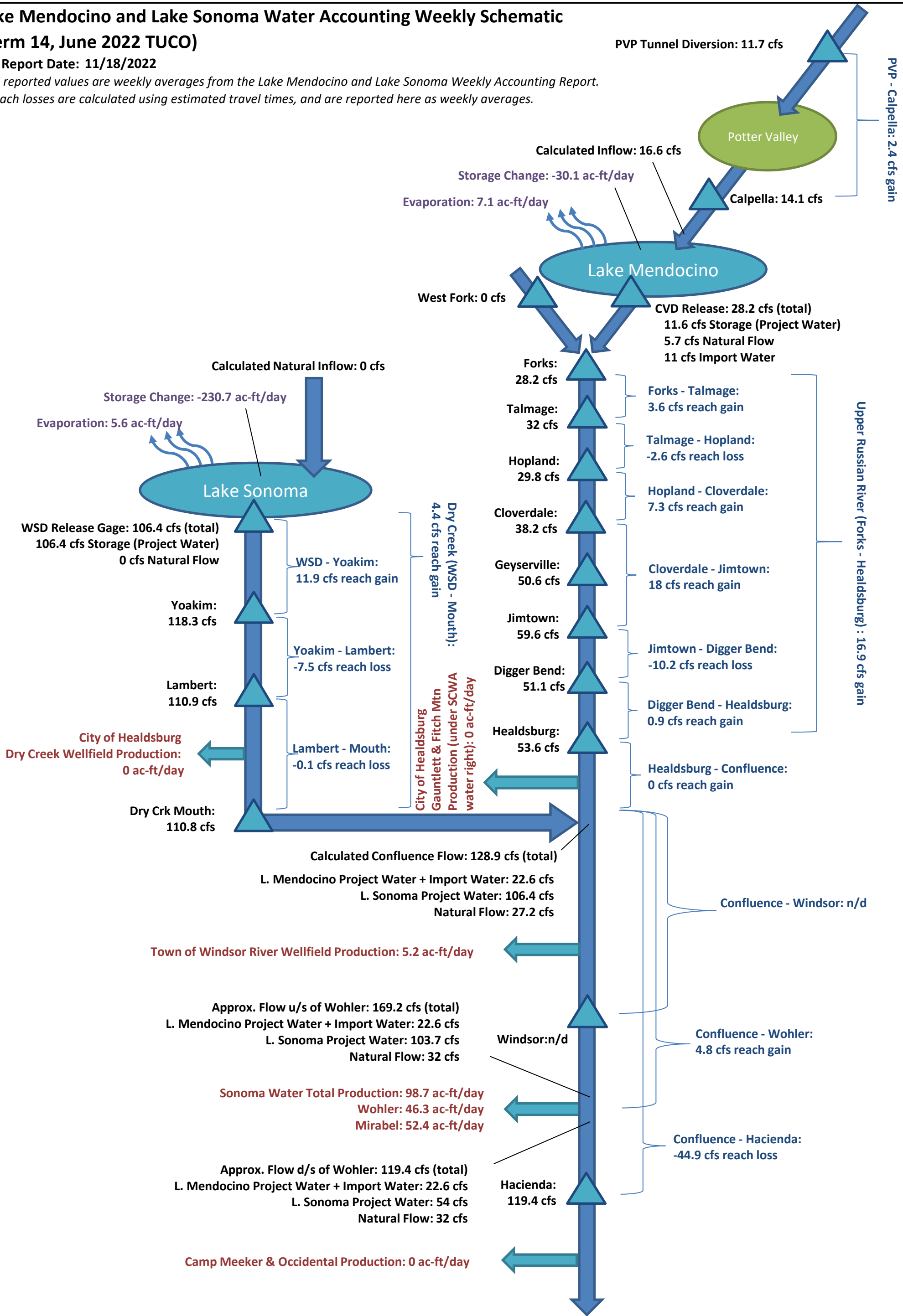
- Water Accounting for the Lower Russian River and Dry Creek is an analysis that approximates the current conditions based on the methodology in Term 12 (6/14/21 Order) report. Values listed include estimated values where measurements are not currently available (red italics).

# Lake Mendocino and Lake Sonoma Water Accounting Weekly Schematic

(Term 14, June 2022 TUCO)

Report Date: 11/18/2022

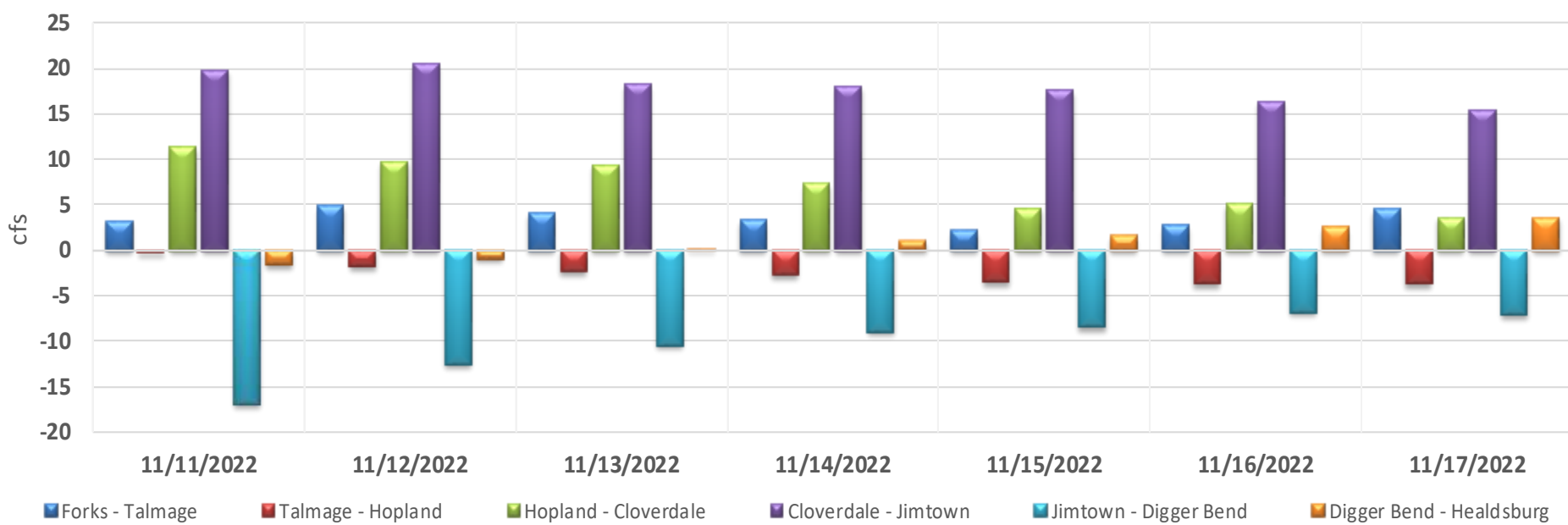
All reported values are weekly averages from the Lake Mendocino and Lake Sonoma Weekly Accounting Report. Reach losses are calculated using estimated travel times, and are reported here as weekly averages.



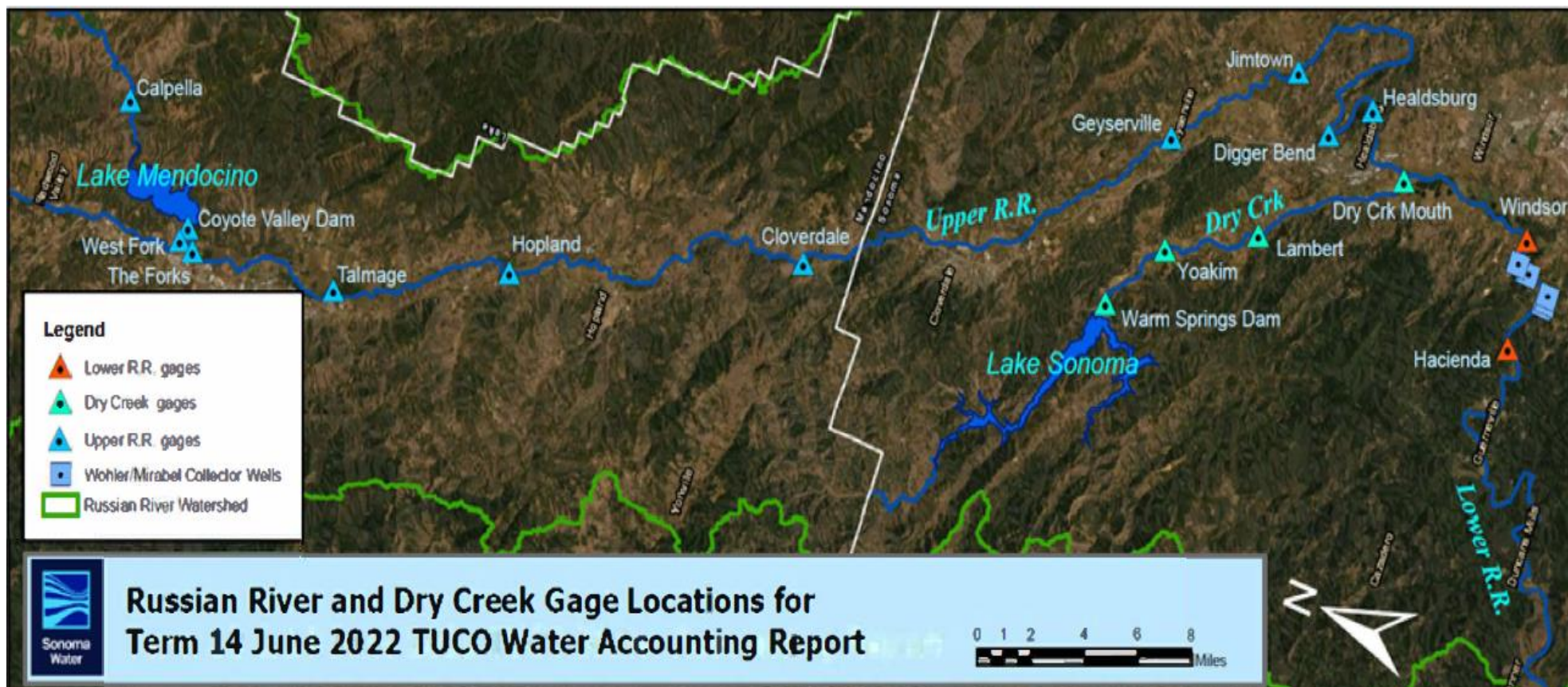
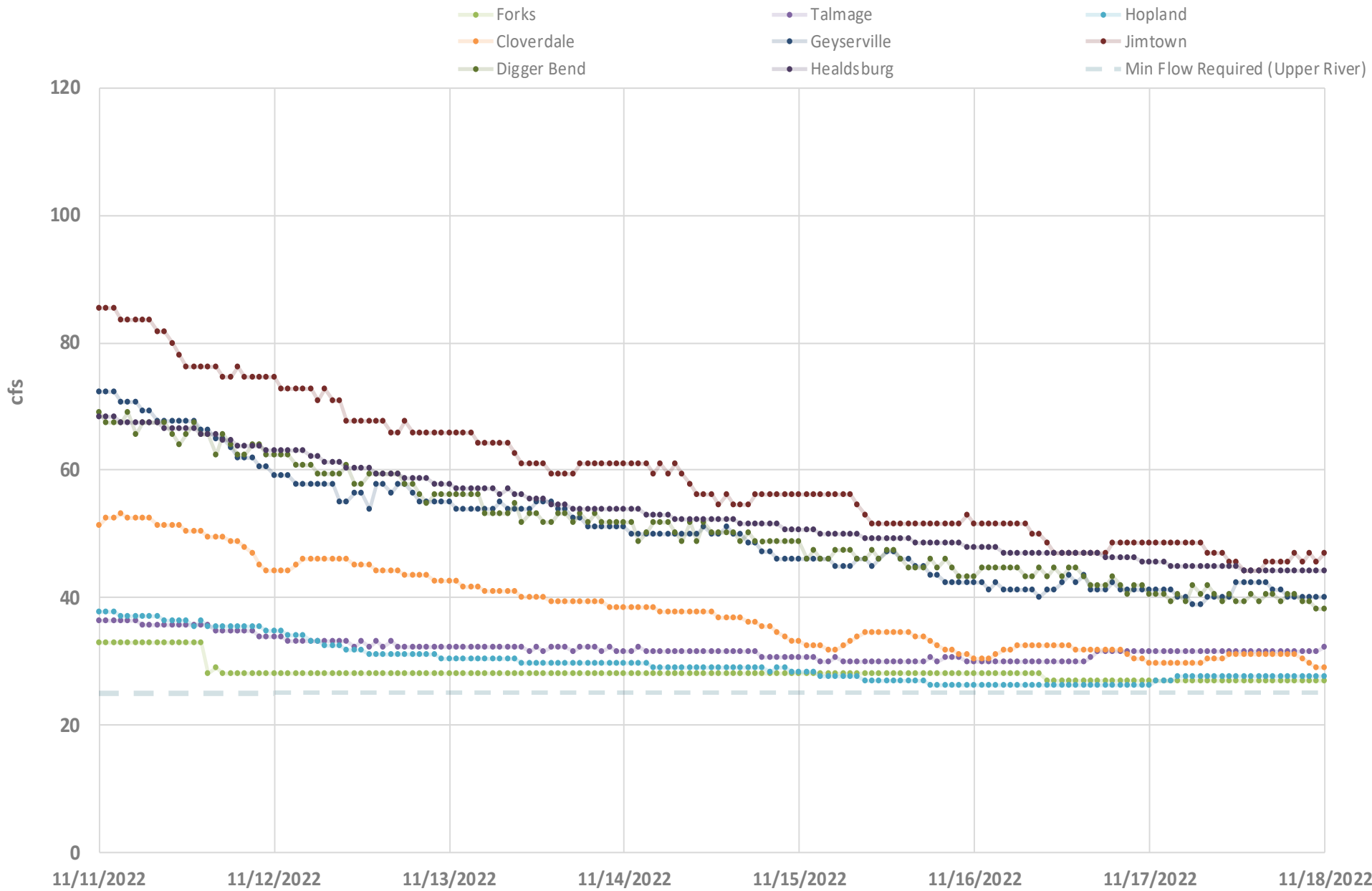
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## UPPER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



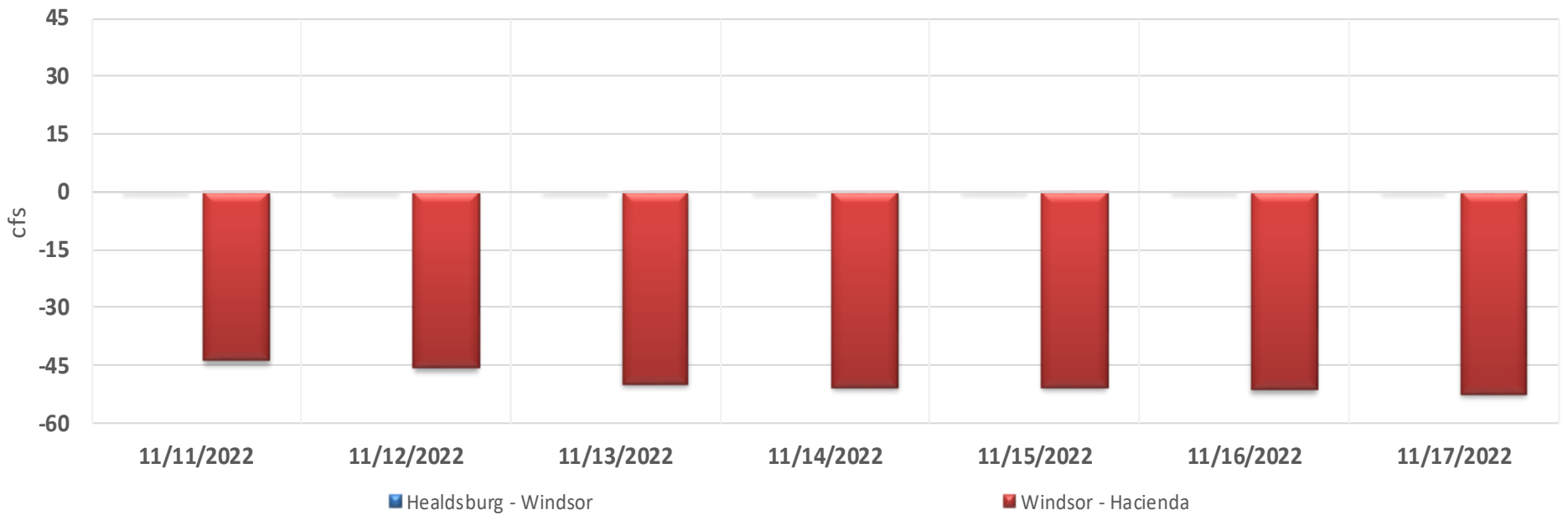
## UPPER RUSSIAN RIVER STREAM FLOWS



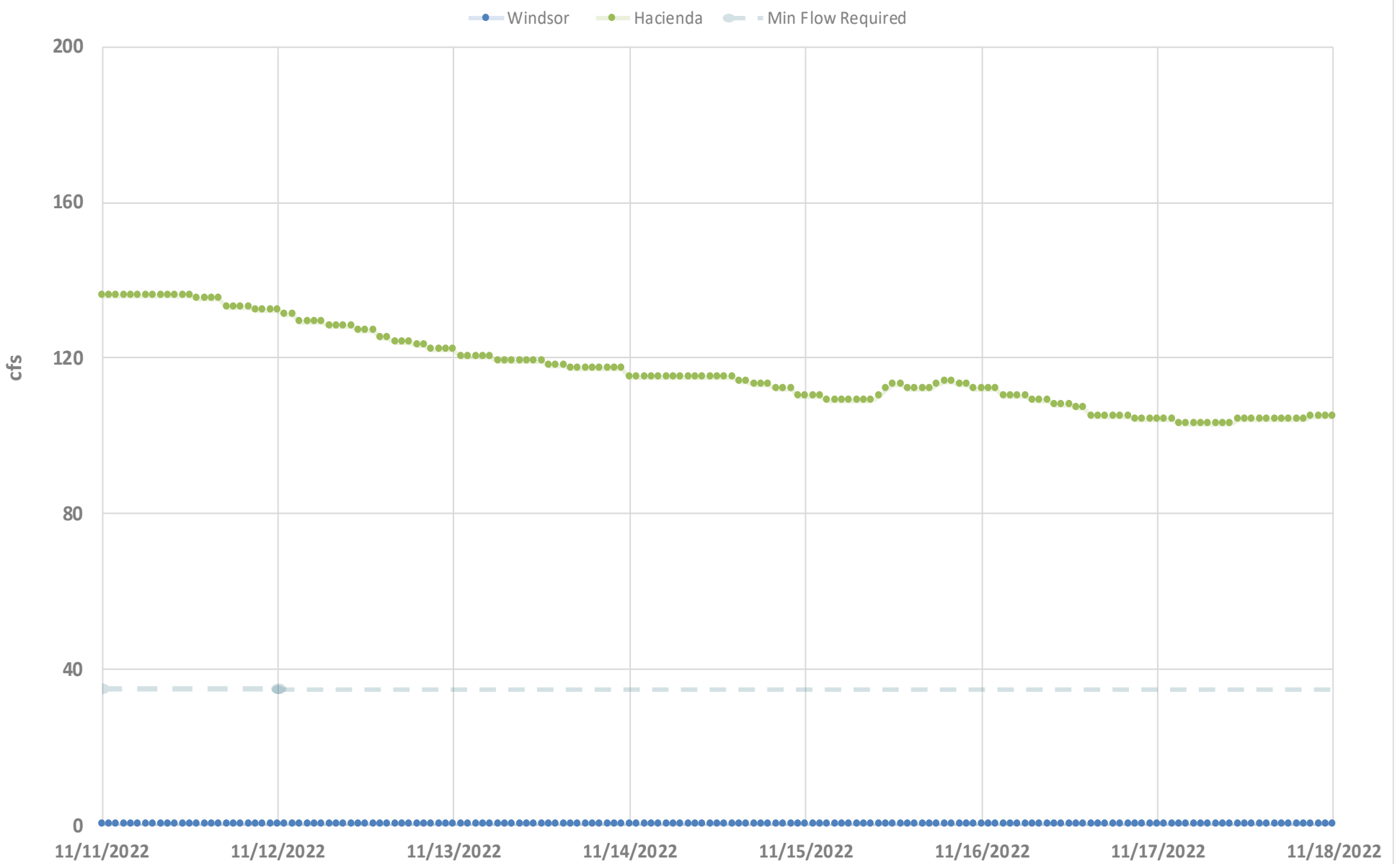
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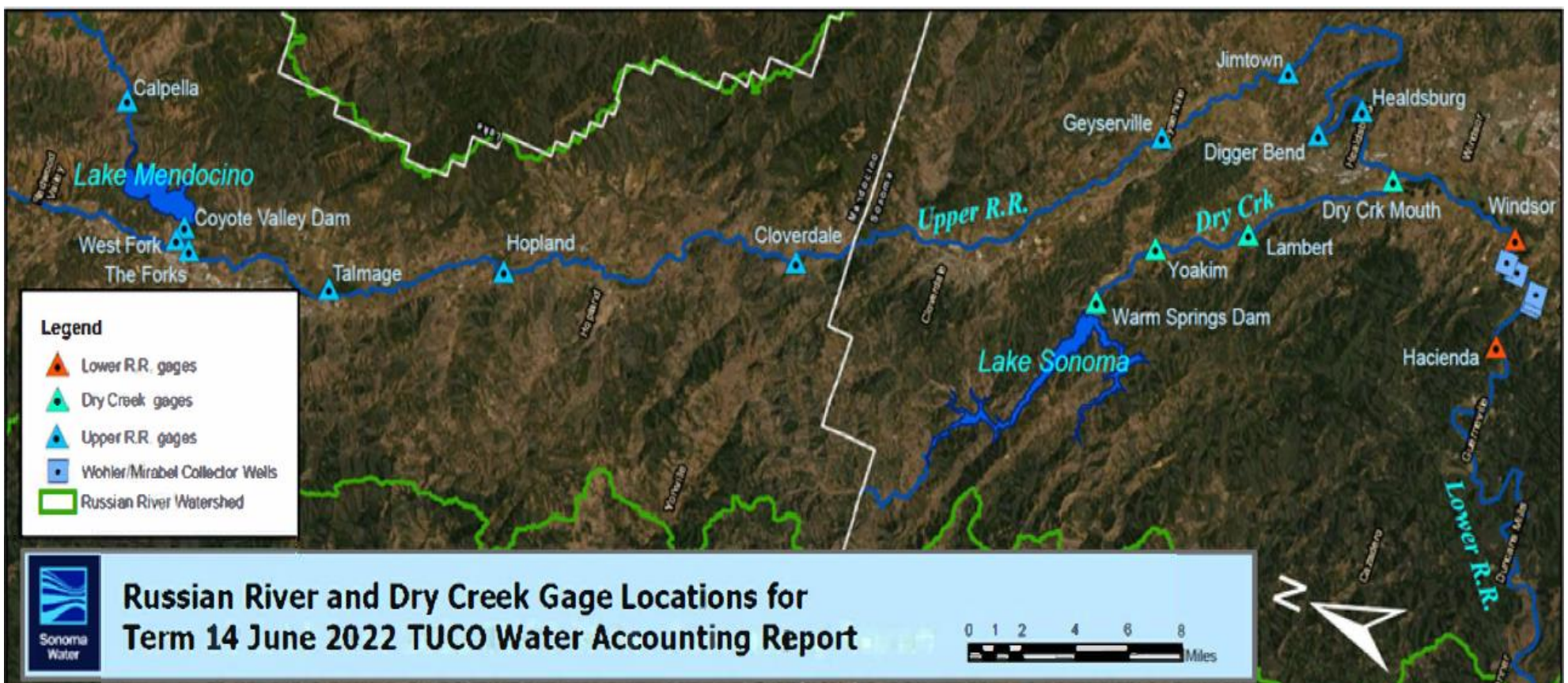
## LOWER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



## LOWER RUSSIAN RIVER STREAM FLOWS



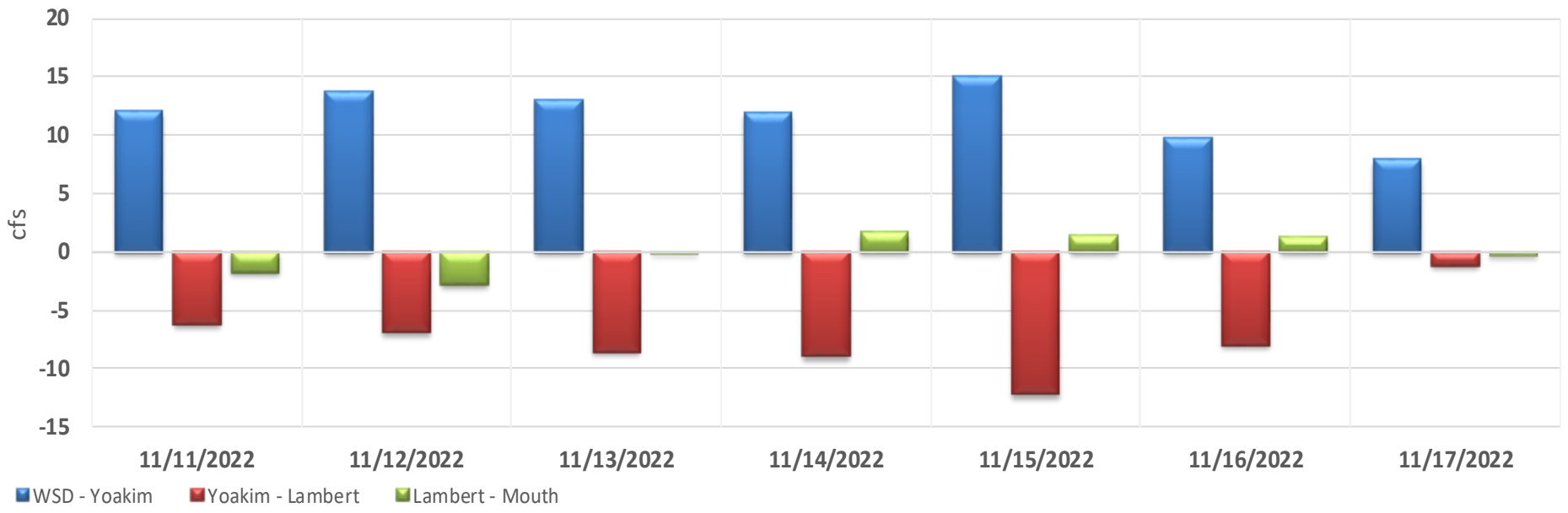
Note: Winsor gage is a seasonal gage and currently not operational. Winsor – Hacienda reach gain/loss is calculated with Healdsburg gages as the upstream gage.



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## DRY CREEK NET REACH GAINS (+) / LOSSES (-)



## DRY CREEK STREAM FLOWS

